

What is claimed is:

CLAIMS

1. A system for controlling moisture in a building wall having stacked straw bales at the core of the wall comprising:
 - 5 a foundation wall for supporting stacked straw bales having a generally horizontal surface defined by spaced-apart edges at least as wide as a straw bale; and
 - a step extending downwardly and away from said foundation wall.
2. The system of claim 1 wherein said step has an upper surface that is
10 below the horizontal surface of said foundation wall.
3. The system of claim 2 wherein said foundation wall and said step are integral and formed of concrete.
4. The system of claim 1 further comprising:
 - 15 a pair of spaced-apart runners attached to the horizontal surface of said foundation wall near its edges, creating a channel therebetween wherein the distance between said runners is less than the width of a straw bale whereby straw bales can be supported on said runners above the horizontal surface of said foundation wall.
5. The system of claim 4 wherein said runners are lengths of 2' by 4's.
- 20 6. The system of claim 4 further comprising:
 - drain rock disposed in the channel between said runners.
7. The system of claim 6 further comprising:
 - 25 a sheet of waterproof material disposed between said runners and the horizontal surface of said foundation wall and below said drain rock and extending onto said step.
8. The system of claim 7 wherein said sheet material is building paper.
9. The system of claim 2 further comprising:
 - 30 a membrane on the wall extending outwardly therefrom in the direction of said step and abutting the upper surface of said step forming a cold joint therewith.
10. The system of claim 9 further comprising:
 - a sheet of waterproof material disposed between said membrane and the upper surface of said step.
11. The system of claim 1 further comprising:

a bond beam disposed above and spaced apart from the stacked bales creating an airspace at the top of the wall.

12. The system of claim 11 further comprising:

5 a plenum disposed in the airspace above said bond beam and defining an enclosed airspace.

13. The system of claim 12 further wherein said plenum is a U-shaped galvanized metal member with its open side facing the straw bales and supported thereby.

14. The system of claim 12 further comprising:

10 vents in said plenum communicating said enclosed airspace with airspace exterior to the wall.

15. A system for controlling moisture in a building wall having stacked straw bales at the core of the wall comprising:

15 a bond beam disposed above and spaced apart from the stacked bales creating an airspace at the top of the wall.

16. The system of claim 15 further comprising:

a plenum disposed in the airspace above said bond beam and defining an enclosed airspace.

20 17. The system of claim 16 further wherein said plenum is a U-shaped galvanized metal member with its open side facing the straw bales and supported thereby.

18. The system of claim 17 further comprising:

vents in said plenum communicating said enclosed airspace with airspace exterior to the wall.

25 19. The system of claim 18 further comprising:

at least one vent in said plenum communicating said enclosed airspace with airspace exterior to the wall.

20. The system of claim 18 further comprising:

30 a plurality of vents in said plenum communicating said enclosed airspace with airspace exterior to the wall.

21. A method of controlling moisture in a vertical wall having a core of straw bales stacked on a foundation wall, the steps comprising;

creating a sump at the bottom of the vertical wall at the level of the foundation wall, and

providing a path for water in the sump to exit the wall.

22. The method of claim 21 further comprising the steps of:
creating an enclosed airspace at the top of the wall above the bales;
venting the enclosed airspace so that moisture in the airspace from
5 the bales can escape from the wall.

23. A method of controlling moisture in a vertical wall having a core of
straw bales stacked on a foundation wall, the steps comprising;
creating an enclosed airspace at the top of the wall above the bales;
venting the enclosed airspace so that moisture in the airspace from
10 the bales can escape from the wall.